BRUHATH BENGALURU MAHANAGARA PALIKE

Yelahanka Division, Yelahanka Zone

Executive Engineeer
Yelahanka Division
B.B.M.P. Bengaluru - 64

No: EE/YNK/BBMP/E-PMT/21/2017-18 Dated: 06-03-2018

APPROVED TENDER SCHEDULE –'B'

Item No: 07

Name of Work:- Construction of R O Plant at BBMP helppoint in ward no 04

Sl	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
1	KSRB 2-1.1: Earth work in surface excavation in hard soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications, Specification No KBS 2.1(a) / 2.3.1,P. No. 5/ Item No. 2.2/ PWD SR 2016-17	Cum	7.50	230.00	Rupees Two Hundred Thirty Only
2	KSRB 2-2.2 : Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m , in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. specification, specification. No. KBS 2.1(b) / 2.3.5, No. 5/ Item No. 2.4/ PWD SR 2016-17	Cum	18.63	300.00	Rupees Three Hundred Only
3	KSRB 100-1 Loading and unloading ofstone aggregates / sand/ kanker/ Moorum /soil KSRRB M100-1 Placing tipper at loading with front end loader dumpting turning for return trip excluding time for haulged and return trip complete as per specification item No 17.1 page 130 and KSRB M.100.4.1 costof haulage excluding loading and unloading MORTH to a distance of 4.00 K.M (Item No 17.4 Page 130 (SR 2016-17)	Cum	26.13	87.00	Rupees Eighty Seven Only
4	KSRB-4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 withOPC cement at 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.57cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2, No. 12/ Item No. 4.3/ PWD SR 2016-17	Cum	7.74	5255.00	Rupees Five Thousand Two Hundred Fifty Five Only
5	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms, in depth, compacting each deposited layers by ramming after watering with lead upto 50m, and lift upto 1.5m, including cost of all labour complete as per specifications, specification. No. KBS 2.9, No. 6/ Item No. 2.10/ PWD SR 2016-17	Cum	8.10	136.00	Rupees One Hundred Thirty Six Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
6	KSRB 5.2.3 Providing and constructing granite / trap / basalt rubble stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 23/ Item No. 5.6/ PWD SR 2016-17	Cum	12.80	4520.00	Rupees Four Thousand Five Hundred Twenty Only
7	KSRB 5.3-3 Providing and constructing granite/trap/basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 26/ Item No. 5.9/ PWD SR 2016-17	Cum	4.61	5405.00	Rupees Five Thousand Four Hundred Five Only
8	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 112/ Item No. 15.1 PWD SR 2016-17	Sqm	10.24	104.00	Rupees One Hundred Four Only
9	KSRB 4.2.2 : Providing and laying in position plain cement concrete of mix M20 withOPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @0.459cum with superplastesisre @ 3lts conforming to IS9103-1999Reffirmed 2008 machine mixed exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls(any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour HOM of machinery, curing, complete as per specifications. Specification. No. KBS 4.1,4.6, No. KBS 4.1,4.6, No. 13/ Item No. 4.11/ PWD SR 2016-17	Cum	5.17	6491.00	Rupees Six Thousand Four Hundred Ninety One Only
10	KSRB 4-6.10 : Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 16/ Item No. 4.37/ PWD SR 2016-17	Sqm	9.86	291.00	Rupees Two Hundred Ninety One Only
11	KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not les.than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20 cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. Page No. 25/ Item No. 5.27/ PWD SR 2016-17	Sqm	43.72	1011.00	Rupees One Thousand Eleven Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 Page No. 17/ Item No. 4.46/ PWD SR 2016-17	Qnl	3.84	6053.00	Rupees Six Thousand Fifty Three Only
13	KSRB 15.3.1 : Providing 12mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever reuired smooth rendering, : Providing and removing scaffolding, including cost of materials, labour. Curing complete as per specifications. Page No. 122/ Item No. 15.11/ PWD SR 2016-17	sqm	97.68	162.00	Rupees One Hundred Sixty Two Only
14	FIXTURES for doors and windows Page No XIV SR 2016-17 VENTILATORS Sl No 395,385,402,386 Hinges 5" heavyduty	Each	4.00	36.00	Rupees Thirty Six Only
	bottom lock nail	Each	10.00	46.00	Rupees Forty Six Only
	MS Clamps	Each	8.00	37.00	Rupees Thirty Seven Only
	Brass screws 25mm	Each	50.00	2.10	Rupees Two and Paise Ten Only
15	Providing and fixing single shutter glass door of 12mm thick plain . Toughened glass (Saint Gobain,Modi float).The door is fixed by using any approved make hardware fitting like patch fitting, pivot, Floor machine, locking arrangements and suitable SS door rails with Floral glass etching for 1/3 portion of door area etc complete. The rate includes cost of all materials, labour, hire of tools & machineries, and as per specification. Page No.310/ Item No. 39.5PWD / PWD SR 216-17	sqm	6.25	12311.00	Rupees Twelve Thousand Three Hundred Eleven Only
16	Providing and fixing Special make glazed Vitrified tiles (Granomite finis) of approved make, quality and colour of sized 6000x600x10mm thick fixed on existing flooring wit ha special roffe adhesive for flooring and skirting etc., complete including providing spears at required interval and removing stains etc., complete. Page No. 104/ Item No. 14.44 / PWD SR 2016-17	sqm	35.08	1154.00	Rupees One Thousand One Hundred Fifty Four Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
	KSRB 14.13.1.: Providing precast chequered mosaic tiles dark shade using ordinary grey cement for steps and flooring, with precast 20mm thick, using marble chips of approved colour 7 to 10 nominal size laid in floors, steps and landings on a bed of 12mm thick cement mortar 1:6, mix, jointed with neat cement slurry mix with pigment to match the shade of tiles curing, rubbing, polishing , oxalic acid wash, wax polish, including cost of materials, labour, HOM machinery complete as per specifications. Page No.112/ Item No. 14.28 SR 2016-17	sqm	6.25	1049.00	Rupees One Thousand Forty Nine Only
18	KSRB 15-17.2: Applying priming coat over new wood surface and / or wood based surface after brushing with wood primer pink paint including preparing the surface after thoroughly cleaning oil, grease, dirt, and foreign matter, sand papering and knotting ready mix paint including cost of materials, labour, complete as per specifications. Page No. 114/ Item No. 15.56 / PWD SR 2016-17	sqm	8.22	38.00	Rupees Thirty Eight Only
19	KSRB 15-17.6: Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as per specifications. Page No.118 / Item No. 15.60.1 / PWD SR 2016-17	sqm	8.22	90.00	Rupees Ninety Only
20	KSRB 15.15.1: Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth cost of materials, labour, complete as per specifications. with primer. Page No.113/ Item No. 15.51.2 / PWD SR 2016-17	sqm	8.22	95.00	Rupees Ninety Five Only
21	KSRB 15-16 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to given an even shade after thoroughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. with primer,page No.114 item No.15.53.2/PWD SR 2016-17	sqm	6.25	90.00	Rupees Ninety Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
	PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron Trpezoidal profiled sheet of approved make 1060mm width (1000mm cover width), 28-30 mm crest height with cest distance of 200 mm c/c with 2ribs at the center for stiffening , The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc –Alu Alloy coating AZ 150 gsm as pe ASTM 1397/A755-550 mpa steel grade. 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling /self tapping screws of 25mm length,to be fixed over the existing purlins, rafters channel and trusses. No. 300/ Item No. 38.30 PWD SR 2016-17 GI Sheet (0.5mm)	sqm	42.25	831.00	Rupees Eight Hundred Thirty One Only
23	Steel Pre fabricates structure with a 14 Guage (3)" each 60 kg including cutting and transportation complete M.s Rectangular tubes 1 Length=35.00 kgs = 4.4x5 =22 /6 mtr per length = 4 length x 35 kgs M.s Rectangular tubes (purlines) 1 Length=35.00 kgs = 8x4 =32 /6 mtr per length = 6 length x 35 kgs Angels truss = 6 Nos x 2.5 Mtrs x 25kg/ mtrs =375 MS Pipe 50mm dia 14 guage = 6 Nos x 50kg (2 pipe =50 kgs = 100kgs	Kgs	825.00	94.00	Rupees Ninety Four Only
1 P. No-5 I.No-2.3	Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2X1.5Sq.mm Cable confirming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. GROUP A KPWD ELectrica SR for 2014-15 2.3.1) Short point upto 3Mtr from tapping point to out let via switch box KPWD ELectrica SR for 2014-15	Point	3.00	143.00	Rupees One Hundred Forty Three Only
	2.3.2) Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box KPWD ELectrica SR for 2014-15	Point	3.00	214.00	Rupees Two Hundred Fourteen Only
	2.3.3) Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box KPWD ELectrica SR for 2014-15	Point	3.00	330.00	Rupees Three Hundred Thirty Only
2 P. No-02 I,No-1.1	Open Conduit System Supplying heavy gauge PVC conduit pipe .....dia .....mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.1.1.1) 19/20mm dia 2mm thick KPWD ELectrica SR for 2014-15	mtr	25.00	50.00	Rupees Fifty Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
P. No-6 I.No-2.5	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. 2.5.2) 1.5 sqmm. KPWD ELectrica SR for 2014-15	Mtr	45.00	18.00	Rupees Eighteen Only
	2.5.1) 1 sqmm.	Mtr	45.00	12.0	Rupees Twelve Only
	2.5.3) 2.5 sqmm.	Mtr	45.00	28.0	Rupees Twenty Eight Only
	2.5.4) 4 sqmm.	Mtr	45.00	41.0	Rupees Forty One Only
4 P. No-3 I.No-6-1.6	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete 1.6.3) 10"x7"x3" (254x178x76mm)	Each	5.00	80.00	Rupees Eighty Only
	1.6.4) 8"x6"x3" (203x152x76mm)	Each	4.00	70.00	Rupees Seventy Only
	1.6.1) 12"x12"x3" (300x300x76mm)	Each	4.00	115.00	Rupees One Hundred Fifteen Only
5 P.No-17 I.No-3.9	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws. KPWD ELectrica SR for 2014-15	Sqcm	1300.00	0.25	Rupees and Paise Twenty Five Only
6 P.No-18 I.No-3.8	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board. GROUP A KPWD ELectrica SR for 2014-15 3.15.1) 6Amps SP Switch	nos	3.00	30.00	Rupees Thirty Only
	3.15.3) 6Amps 3 way 5 pin Socket	nos	3.00	50.00	Rupees Fifty Only
	3.15.6) 6 Amps lamp holder	nos	10.00	40.00	Rupees Forty Only
	3.15.13) 16/6 Amps combined plug and socket with control switch	nos	10.00	260.00	Rupees Two Hundred Sixty Only
7 P.No-16 I.No-3.7	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP B 3.7.18) 1000-1200Watts Dimmer KPWD ELectrica SR for 2014-15	Each	4.00	444.00	Rupees Four Hundred Forty Four Only
8 P.No-54 I.No-6.2	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 6.16.1) 5-32Amps SP KPWD ELectrica SR for 2014-15	Each	4.00	416.00	Rupees Four Hundred Sixteen Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
9 P.No-55 I.No-7.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia KPWD ELectrica SR for 2014-15	No	4.00	2727.00	Rupees Two Thousand Seven Hundred Twenty Seven Only
10 P.No-44 I.No-6.7	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 6.7.1) 16Amps	Each	4.00	100.00	Rupees One Hundred Only
11 16/3	Supply patty type fluorescent tube light fitting of 4'-36/40 watts fluorescent tube fitting, made out of M.S sheet and stove enameled with low loss open construction copper wound ferromagnetic ballast, starter, locking type brass contact holders mounted on double fold type sheet base fully wired for use on230 Volts A C Supply including 1No 4'-36/40 Watts fluorescent tube. c) Group 'C' KPWD ELectrica SR for 2014-15	Each	10.00	330.00	Rupees Three Hundred Thirty Only
12 P.No-114 I.No-17.7	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps. 17.7.1) On wall / ceiling / Rafter / Girders KPWD ELectrica SR for 2014-15	Each	10.00	90.00	Rupees Ninety Only
13 65/1	SHORT POLES: (whereas clearance between Messenger wire and ground is inadequate) a) Supplying and fixing 40mm diat 2.90 thick GI pipe 1.8m long complete with atleast 2 GI pipe 1.8m, long complete with atleast 2 Nos of through bolts 12 mm dia with MS back plate 100x100x6mm dia with eye bolt fixed at top deadeninding messenger wire with masonary patch work etc., complete as per approved drawing (for single phase installations) KPWD ELectrica SR for 2014-15	Each	5.00	520.00	Rupees Five Hundred Twenty Only

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
14 65/ 5	INSULATED CABLE ON MESSENGER WIRE Using 2 single core wires for a single phase and 4 single core wires for 3 phase. Supplying and stringing PVC insulated and PVC sheathed 650/1100V class aluminium conductor of size supported by 3.15mm (10 SWG) GI messenger wire with two break insulators one at each end of the span with suspenders at intervals of 0.75m. Each suspender shall be of porcelain reel insulator of suitable core through which insulated wire passes(single core or twin core as the case may be) and this reel insulator shall be fixed to the messenger wire using 2mm (No.14SWG) GI wire suitably bent and twisted. Separate reely insulator shall be provided for each wire, the messenger wire shall be ded-ended on the clamp provided to the departmental pole wide item No.4 above.(Page No.56 item No.5 a)Single Phase using 2 Wire e) 16 Sqmm KPWD ELectrica SR for 2014-15	R mtr	80.00	80.0	Rupees Eighty Only
	RAW WATER PUMP :				
	Quantity	1 No.			
	Type	Centrifugal mono block			
	MOC & Make	UKL			
	Motor Rating	0.75 HP			
	PRESSURE SAND FILTER :				
	Quantity	1 No.			
	Capacity	1000 LPH			
	MOC & Make of housing	UKL			
	MOC & Make of cartridge	UKL			
	Capacity	1000 LPH			
	MOC & Make of vessel	UKL			
	Diameter	400 mm			
	Type of Valve	Single - multiport			
	Media	Support bed + sand			
	MICRON CARTRIDGE FILTER :				
	Quantity	1 set			
	Filter Rating	5 microns			
	Size	20" long			
	ANTISCALANT DOSING PUMPS :				
	Quantity	1 No.			
	Type	Electro - magnetic			
	Capacity	1.5 LPH @ 4 Bar			
	Dosing Tank	HDPE - 50 ltr			
	HIGH PRESSURE PUMP :				
	Quantity	1 No.,			
	Capacity	1700 LPH			
	Type of Pump	Vertic al Multist			
	MOC	SS 304			
	Motor Rating	2 HP, 3 Phase			
	Maximum Pressure	12 kg / cm2			
	Make	UKL			
	RESERVE OSMOSIS SYSTEM :				
	Quantity	1 No.			
	Capacity	1000 LPH			
	Module Type				

	Description	Unit	Approved Qty	Rate Quoted by the Contractor Approved Rates Sri N RAJESH (K FLOW RO)	
				Rate	Rate in Words
	Membrane Specifications {Polyamide}				
	Make of Membrane	UKL			
	No. of Membranes				
	UV STERILISER				
	Max. Treatment Flow	1 m3/hr			
	No. of Lamps	1 No.			
	Wattage	39W			
	Efficiency	######			
	Material of construction	SS 304			
-	PRODUCT WATER QUALITY :				
	Appearance	Crystal Clear			
	Abide by the ISO standards	Yes			
	S S Tank : 304 grade with 16 gauge 2000 Liters capacity				
	304 grade 10 gauge SS Pipe{with steam valve} 25 ft				
	COIN BOOTH DISPENSING UNIT				
	Raw Water Storage Tank	Function – For storage of raw water			
	Type/ MOC	Two/Three Layered PE			
		Storage drinking / potable water. 5000liters capacity.			
	BBMP Approved Rate		1.00	842854.00	Rupees Eight Lakh Forty Two Thousand Eight Hundred Fifty Four Only

Signature of the Contractor

Executive Engineer,
Yelahanka Division,
BBMP, Bengaluru-64.